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4. (Twice Amended) A method according to claim 1, wherein the encapsulation operation in step c) is performed by adding the dispersion obtained in step b), to said aqueous polyethylene glycol solution while subjection last-mentioned aqueous solution to a stirring and homogenization operation.

5. (Once Amended) A method according to claim 4, wherein the stirring and homogenization operation is performed by a low intensity and low energy process, e.g., propeller mixing or the use of motionless mixers.

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7. (Twice Amended) A method according to claim 1, wherein said biodegradable polymer is insoluble in the aqueous polyethylene glycol solution used in step c), preferably an aliphatic polyester.

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9. (Twice Amended) A method according to claim 1, wherein said biodegradable polymer is selected from homo or copolymers prepared from α -hydroxy acids, preferably lactic acid and glycolic acid, and cyclic dimers of α -hydroxy acids, preferably lactides and glycolides.

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11. (Twice Amended) A method according to claim 1, wherein said organic solvent used in step a) is immiscible or essentially immiscible with said aqueous polyethylene glycol solution used in step c), but slightly or very slightly soluble therein, and capable of dissolving said biodegradable polymer, and is preferably selected from ethyl acetate, dichloromethane, methyl ethyl ketone and methyl isobutyl ketone.

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12. ~~(Twice Amended)~~ A method according to claim 1, wherein the active substance which is dispersed in step b) has a particle size within the range of about 0.5-20 μm , preferably 0.5-10 μm , more preferably 0.5-3 μm .

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Please add the following new claims 23-44 to the application:

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23. ~~(New)~~ A method according to claim 1, wherein said biodegradable polymer is slightly soluble in the aqueous polyethylene glycol solution used in step c), preferably an aliphatic polyester.

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24. ~~(New)~~ A method of encapsulating an active substance in a biodegradable polymer, which comprises:

- a) dissolving said biodegradable polymer in an organic solvent therefor;
- b) emulsifying said active substance, dissolved in water or other aqueous solvent therefor, in the organic solution obtained in step a), to provide an emulsion with the active substance as the inner aqueous phase thereof; and
- c) subjecting the dispersion obtained in step b) to an encapsulation operation with an aqueous polyethylene glycol solution as a continuous phase, such that micro- or nanoparticles having the active substance encapsulated therein are obtained.

25. ~~(New)~~ A method according to claim 1, wherein the microencapsulation operation in step c) is performed in the presence of an aqueous polyethylene glycol solution

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having a polyethylene glycol concentration within the range of 20-80% (w/w), preferably 20-60% (w/w), such as 30-55% (w/w) or 30-50% (w/w).

26. (New) A method according to claim 1, wherein the polyethylene glycol has a molecular weight of about 1000 to 40000 Da, preferably about 5000 to 35000 Da.

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27. (New) A method according to claim 1, wherein the encapsulation operation in step c) is performed by adding the dispersion obtained in step b) to said aqueous polyethylene glycol solution while subjection last-mentioned aqueous solution to a stirring and homogenization operation.

28. (New) A method according to claim 4, wherein the stirring and homogenization operation is performed by a low intensity and low energy process, e.g., propeller mixing or the use of motionless mixers.

29. (New) A method according to claim 1, wherein said encapsulation operation in step c) is performed in the absence of any surfactant.

30. (New) A method according to claim 1, wherein said biodegradable polymer is insoluble in the aqueous polyethylene glycol solution used in step c), preferably an aliphatic polyester.

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31. (New) A method according to claim 1, wherein said biodegradable polymer has a weight average molecular weight in the range of about 2000 to 200,000, preferable about 2000 to 110,000.

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32. (New) A method according to claim 1, wherein said biodegradable polymer is selected from homo or copolymers prepared from α -hydroxy acids, preferably lactic acid and glycolic acid, and cyclic dimers of α -hydroxy acids, preferably lactides and glycolides.

33. (New) A method according to claim 9, wherein a copolymer of lactic acid/glycolic acid or a mixture of polylactic acid/polyglycolic acid is used as said biodegradable polymer, the weight ratio of (poly)lactic acid/(poly)glycolic acid being within the range of about 99/1 to 35/65, preferably 95/5 to 50/50.

34. (New) A method according to claim 1, wherein said organic solvent used in step a) is immiscible or essentially immiscible with said aqueous polyethylene glycol solution used in step c), but slightly or very slightly soluble therein, and capable of dissolving said biodegradable polymer, and is preferably selected from ethyl acetate, dichloromethane, methyl ethyl ketone and methyl isobutyl ketone.

35. (New) A method according to claim 1, wherein said active substance is a biologically active substance, which is preferably selected from proteins, (poly)peptides, (poly)nucleotides, plasmides and DNA.

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36. (New) A method according to claim 35, wherein said biologically active substance is selected from growth hormone, erythropoietin, interferon (α , β , γ -type), vaccine, epidermal growth hormone, Factor VIII, LHRH analogue, inulin, macrophage colony stimulating factor, granulocyte colony stimulating factor and interleukin.

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37. (New) A method according to claim 1, wherein said active substance is a biologically active substance in the form of a non-protein drug selected from the following groups: anti-tumor agents, antibiotics, anti-inflammatory agents, antihistamines, sedatives, muscle relaxants, antiepileptic agents, antidepressants, antiallergic agents, bronchodilators, cardiotonics, antiarrhythmic agents, vasodilators, antidiabetic agents, anticoagulants, hemostatics, narcotic agents and steroids.

38. (New) A method according to claim 1, wherein said active substance is a non-biological substance, which is preferably selected from pesticide, fragrance, flavouring agent, catalyst and herbicide.

39. (New) A method according to claim 1, wherein the amount of said active substance is in the range of about 0.001% to 90%, preferably about 0.01% to 70%, more preferably about 0.1 to 45%, and most preferably about 0.1 to 40%, said percentage being by weight based on the weight of the final particles.

40. (New) A method according to claim 1, wherein the particles obtained in step c) are separated from said continuous phase, preferably by centrifugation or filtration

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followed by rinsing with water or other aqueous medium, and dried or allowed to dry, for instance in a vacuum, in the presence of a nitrogen gas flow, by lyophilisation or by air suspension drying.

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41. (New) A method according to claim 1, wherein step c) is performed such that the particles obtained are microspheres or capsules or nanospheres or capsules.

42. (New) A method according to claim 41, wherein said particles have a mean diameter in the range of 10-200 μm , preferably 10-100 μm .

43. (New) Sustained release micro or nanoparticles containing an active substance encapsulated in a biodegradable polymer, obtainable by the method of claim 1.

44. (New) Particles according to claim 43, which are suitable for parenteral, nasal, pulmonal or oral administration of said active substance.
